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UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

In the Matter of the Proposed Plan of the

LI TUNGSTEN SUPERFUND SITE
located in

THE CITY OF GLEN COVE, NEW YORK

PUBLIC MEETING in the above-captioned
matter, held on the 16th day of August, 1999
at 7:10 p.m., at the City Council Chamber, 9
Glen Street, Glen Cove, New York, pursuant to
a Notice of Public Meeting, and before
Florence V. Wiles, a stenographer and Notary
Public of the State of New York.

B E F O R E :

Cecilia Echols, Community Involvement
Coordinator

Doug Garbarini, Chief Eastern New York
Remediation Section

Ed Als, Project Manager

Marian Olsen, Risk Assessor

Carl Garvey, Regional Counsel

Jim Doyle, Regional Counsel

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3 MAYOR SUOZZI: Good evening everybody,
4 my name's Tom Suozzi. I'm Mayor of the City
5 of Glen Cove. I would like to welcome you and
6 the EPA here and put into context what this
7 meeting is in relation to: The city's
8 waterfront revitalization.

9 The City of Glen Cove is about seven
10 square miles. It's home to about 25,000 to
11 30,000 people. In the City of Glen Cove we
12 have 10 miles of waterfront, of which nine
13 miles, 300 acres, is water preserve, and we
14 have gold coast estates and a lot of public
15 space available for everyone to enjoy.

16 One mile of our city's waterfront was
17 originally an industrial area of the city that
18 is home to several major environmental
19 problems, two federal Superfund sites, and the
20 one we're discussing tonight, Li Tungsten
21 Corporation site as well as Captain's Cove are
22 New York State fund sites which we have
23 discussed at every meeting prior to
24 tonight.

25 The city's objective is to try and
cleanup this area, recycle and reuse the

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properties and put them in productive use once again.

What the waterfront revitalization project is going to be the focus of now is cleaning up the pollution in this area, which is, as I said, home to many environmental problems of which one of the most significant is in Li Tungsten. It's home to radioactive waste, heavy metals, other types of environmental problems that have been there for decades, that finally, after a lot of attention being focused on this area by the City of Glen Cove, by citizens of the city, by environmental groups, Li Tungsten -- in fact our area is one of 16 areas in the nation that is a model for cleaning up sites.

We're very excited that the EPA has finally reached this step in the process that brings us that much closer to cleaning up the mess at Li Tungsten. Our job now is to insure the plan is going to insure our residents in a permanent way may utilize this part of the city.

Again, Glen Cove is a beautiful place,

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1 along the Glen Cove Creek which really has
2 been important to our city's history, it was
3 once important to all of Long Island going
4 back to the 1600's and the Duryeas. And you
5 know at one time this location was the largest
6 job provider, largest taxpayer, and very
7 important to the local economy, but now we're
8 left dangerous and abandoned properties that
9 don't provide any jobs, don't provide any
10 taxes and are dangerous and polluted. And the
11 waterfront revitalization project is about
12 cleaning up that mess that has been left to us
13 and making sure anything we do in the future
14 will be sustained for generations to come and
15 in harmony with the natural environment. So
16 Li Tungsten cleanup is one of many factors,
17 but one of certainly the major factors in the
18 cleanup of this entire area.

19
20 With that, I'm going to turn it over to
21 the EPA who are going to conduct a public
22 hearing about the cleanup of Li Tungsten.

23 **MS. ECHOLS:** Good evening. I would like
24 to thank everyone for coming out tonight.
25 We're ready to start our presentation for the

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Li Tungsten Superfund Site.

I'm Cecelia Echols. I'm the Community Relations Coordinator for the Li Tungsten Superfund Site, and we're here to discuss the proposed plan of cleanup for the Li Tungsten Facility as well as the Captain's Cove property.

I want to tell you a bit about community relations program that wants the community to be involved in the decision-making process. We look for all your input throughout the cleanup process during the proposed plan, during the remedial investigation feasibility studies, community interviews, construction complete, construction design and so forth.

I hope that everyone has had an opportunity to sign in. I see that some people signed in, but they did not include their mailing address. If you could go back and put your mailing address back on the sheet, I would like to include you on our mailing list. And in the future if any mailings go out, you will be able to receive them.

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One of the handouts was the proposed plan, I hope that everyone has received that; another one is the overhead that Ed will be discussing. If you won't be able to see the screen, you'll have them on your lap.

The public comment period started July 28th and it has been extended to September 17th. In our community relations program we do make sure that everyone receives the proposed plan. We mailed out approximately 175. I received many phone calls in the past two and-a-half weeks for people who wanted to receive the proposed plan. I hope if there's anyone in here who called me, I hope you have received it before the meeting.

All of your comments tonight will be a part of our summary that will be prepared in our office, which is a part of the record of decision which is then signed by the regional administrator.

We are seeking your input tonight. If you do not feel comfortable enough to address your question tonight, you can e-mail your comments to Ed, his e-mail address is on the

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1 second page in the handouts. I also have an
2 800 community relations hotline, the number is
3 1-800-346-5009, it comes directly into me. If
4 you have any questions or concerns, you can
5 call me directly, and I will try to address
6 them.

7
8 On the agenda today is Doug Garbarini,
9 the second to the right of me. He will give
10 an overview of the Superfund process. Then
11 we'll move to Ed Als, he's the project
12 manager. He's been on this site for many,
13 many years. He knows a lot of people out here
14 in this community. If you have any questions
15 or concerns about the presentation tonight,
16 you can call him or I to address any of those
17 concerns, like I said, if you don't want to do
18 them in person. He's going to talk about the
19 site background, the remedial investigation
20 feasibility study and the preferred remedy.
21 We also have Marian Olsen, she's the risk
22 assessor. We have Carl Garvey and Jim Doyle,
23 the EPA's counsel.

24 After the presentation from Doug and Ed,
25 we open up the questions and answers. We have

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2 a stenographer. If you would, please stand,
3 state your name and spell your last name for
4 the record, we will appreciate it. I'll hand
5 it over to Doug.

6 MR. GARBARINI: Thank you, Cecelia. I
7 would just like to start out by thanking you
8 all for coming out for tonight's meeting. I'm
9 very pleased to have you here, glad that you
10 can watch the process. I realize there are
11 quite a few of you that have been very active
12 in the community over the last few years and
13 have provided EPA with a lot of input, which
14 we have found very valuable, we appreciate
15 that, and we hope that you will continue it
16 right through our remedy selection process as
17 well as through our completion of our
18 construction at the site.

19 I'm just going to take about 10 minutes
20 to walk you through an overview of the
21 Superfund process, give you a few tidbits of
22 information just so you can get a better feel
23 for the setting in which this meeting tonight
24 is taking place. But as Cecelia said, the
25 focus of the night's meeting is really on the

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proposed plan and the remedy process.

Just to step back in time, if you go back to 1980, Congress passed the Comprehensive Environmental Response and Compensation and Liability Act, otherwise known as CERCLA or Superfund. Back in 1980 this decision by Congress came about because of the fact that there were a large number of sites across the country that were coming to national attention as abandoned hazardous waste sites, most notably Love Canal or Valley of the Drums. At that point in time, the federal government did not really have one piece of legislation that would allow us to respond to such emergencies. We had to use a patchwork of various local, state and federal government funding sources, as well as laws to respond to the Love Canal and the Valley of the Drums. So what Superfund did is provide us with a Superfund or pot of money that we could use to respond to long-term studies and cleanups at abandoned hazardous waste sites primarily. Basically, this pot of money is coming from taxes on petroleum and chemical

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1 industries primarily. It's used, as I said,
2 for NPL, or National Priority List sites.
3

4 Now you may ask, how does a site become
5 a National Priority List site? It starts out
6 by our pre-remedial investigations. A site is
7 first brought to our attention and discovered
8 by a locality or state and referred to us. We
9 then go through a process of ranking the site.
10 We go out and do a preliminary evaluation to
11 determine the relative threats posed by the
12 site. We basically run through data that we
13 have through a model called the hazard ranking
14 system and it will basically spit out a score
15 for the site. If it scores above a
16 pre-determined value, it is then proposed for
17 the National Priorities List. We go through
18 about a 60-day public comment period and
19 unless something very unusual happens, the
20 site is almost always added as final listing
21 to the NPL, National Priority List
22 site. There are about 1,400 sites across the
23 country that have been or currently are on the
24 NPL. Approximately 100 of those are located
25 in New York State, just to give you a feel for

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1 where we stand.

2 The other thing that CERCLA did, aside
3 from giving us a pot of money to perform these
4 long-term studies and the cleanups, it also
5 gave us money to perform emergency actions
6 called removal actions, and our removal
7 program has been highly successful for us. We
8 have conducted more than 5,600 removal actions
9 across the country. And, removal actions,
10 unlike remedial actions which generally
11 require a lot of initial studies and then a
12 long-term response action, are generally short
13 in duration, are generally less than a year,
14 are usually a lot cheaper, generally less than
15 a couple million dollars, and they're pretty
16 much used to respond to acute health threats
17 or immediate threats or potential releases.
18 For instance, we might provide residents with
19 an alternative supply of drinking water, or we
20 might relocate residents, or we might do
21 something as simple as contain leaking drums
22 or leaking tanks something along those
23 lines.

24 There's one other tool which Congress
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1 gave us with Superfund and really it's
2 actually a bag of tools or enforcement tools.
3 These are very important and powerful
4 provisions that allow us to have those parties
5 that are responsible for the contamination at
6 the site, cleanup the site. And we can do
7 this by asking the parties to perform the work
8 on consent, or we can unilaterally order them
9 to perform the work, or we can utilize this
10 Superfund or pot of money and then come back
11 after them to try to recoup our cost for work.
12

13 A nifty little provision that's also
14 folded in there is if we ordered those parties
15 to perform the work and they decline to do it,
16 we can actually take them to court and seek
17 three times the cost of the remedy from their
18 failure for them to comply; so this is a
19 powerful tool.

20 If you look at our settlements
21 throughout the country, we have settlements on
22 the order of about 15 and-a-half billion
23 dollars across the country. The figure in New
24 York State is about a billion dollars.

25 Seventy percent of our new activities at

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1 sites are being paid for or performed by
2 responsible parties, and where we invest one
3 dollar of EPA's funds on enforcement, we get a
4 return of any seven dollars for each dollar.
5

6 One other thing that I'd just like to
7 mention about removal actions, these can be
8 conducted that are either on the NPL or off
9 the NPL, obviously, if you look at the
10 numbers. We screen all of our NPL sites to
11 see if there is a removal action that can be
12 taken. We want to limit the acute threats as
13 soon as possible. In the instance of Li
14 Tungsten, and the instance of about 15 percent
15 of the other sites throughout the country, we
16 have taken removal actions. In fact, we have
17 taken a couple at Li Tungsten. The one that
18 we have recently completed required that the
19 EPA spend more than six million dollars of the
20 federal pot or Superfund monies. Ed will be
21 getting into that in a little more detail in a
22 couple more minutes in his presentation.

23 Let me get back to the remedial process.
24 The first step is the remedial studies phase.
25 We have what is called the remedial

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investigation, where we actually go out and we sample the soil, the groundwater, the air sediments if they happen to be present. We take a look at the data when it comes back, and we try to determine the nature and extent of contamination. What sort of contaminants are we seeing; what levels are they present at; where are they located. We take this information and we try then to look at what sort of populations might be exposed to the contaminants at the site. For instance, people living nearby or people drinking the groundwater at the site, people that happen to be trespassing across the site. We then determine what risks are acceptable and what risks are unacceptable. And when we find unacceptable risks, we then move into something that is called the feasibility study. In that what we try to do is develop alternatives for reducing those risks to the acceptable levels. We developed these alternatives, we compared them to nine evaluations criteria, which Ed will tell you about in a minute, we then document this in a

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feasibility study.

The agency, together with New York State DEC takes a look at the feasibility study and says, based on what we're reviewing, we think the best alternative for cleaning up the site is alternative X. We place that in a document called proposed plan, which is the subject of tonight's meeting. We ask the public for their input. We open up a comment period. We hold a public meeting, and we take all of your comments, whether they be verbal or written, we'll go back to the office at the end of the comment period, and we'll prepare a document, which Cecelia mentioned, called a Responsiveness Summary. This responsiveness summary becomes part of a larger document called the Record of Decision.

In the Record of Decision document, we put forward a conceptual remedy for the site. This document is signed by the highest ranking official of the Region II office; it becomes sort of our decision document for the cleanup of the site. We then, in most occasions, offer the responsible parties the opportunity

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1 to perform the design and remedial action at
2 the site. Basically, the remedial design is
3 an engineering phase where we put together the
4 nuts and bolts and figure out exactly how the
5 site is going to be cleaned-up. We then move
6 into the construction phase, you know, where
7 we get the bulldozers onto the site. We
8 actually get our construction, get our
9 treatment units built. If we need to remove
10 soil, we get our bulldozers out there or
11 backhoes, whatever, and take care of our
12 construction phase at the site.

14 Just because the construction is done,
15 that does not mean that our efforts are over
16 at that point. We then enter the
17 post-construction phase, which can include
18 operation of your treatment systems, long-term
19 monitoring, these sorts of things. But before
20 we can actually get to this critical milestone
21 here, the deletion, we need to achieve all the
22 cleanup goals that we specified in our record
23 of decision.

24 In a lot of sites throughout the
25 country, although we have may have completed

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1 construction efforts, we may not have achieved
2 our cleanup goal; for instance, some our
3 groundwater remediation sites, we have
4 actually predicted that cleanup goals will not
5 be achieved for 10, 20, 30 years or even
6 longer. So, when you go back and look at the
7 National Priorities List and say well, the
8 agency only has 1,400 sites on the list, but
9 they have only deleted, I think the figure now
10 is 190, it's not necessarily a good
11 representation of all the work that has been
12 done on the site. So we also talk about the
13 construction completions, and we also have a
14 list called the construction completion list.
15 Currently the agency has completed something
16 like construction at about 610 sites
17 throughout the country, something on that
18 order. We're hoping to achieve 650 by the end
19 of this September. So that's a much larger
20 number than the deletion categories. As you
21 can tell, it represents close to 45 percent of
22 the NPL sites where we actually completed
23 construction.
24

25 I think that's pretty much all I had to

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1
2 say at this point. I'll take questions on
3 this after the close of Ed's presentation.
4 For now, I'll turn it over to Ed and the
5 agency's proposed plan for the site.

6 (Overhead projector presentation.)

7 MR. ALS: How many people are actually
8 familiar with the Li Tungsten and the
9 Captain's Cove properties? I know some of you
10 are; I recognize your faces. Okay, so I won't
11 spend a lot of time on the aerials.

12 We're here someplace at City Hall
13 (indicating); this is Glen Cove Creek
14 (indicating); this is north (indicating), and
15 this blue outline is the Li Tungsten facility
16 (indicating), probably not quite sure when
17 this was taken. Certain buildings are still
18 up like the Dice Complex here, that's been
19 down for approximately a year now. East
20 Building, that's been taken out as a result of
21 prior EPA actions at the site.

22 Again, it's been a manufacturing
23 facility here in Glen Cove since about 1942
24 involved in manufacturing Li Tungsten
25 products, started during the war and basically

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1
2 it's been a manufacturing facility here in
3 Glen Cove for approximately 43 years,
4 basically stopped operations around 1985 and
5 has been sitting there fallow for about the
6 last 14 years.

7 We got involved out there in 1989-1990
8 for removal action; that was our first removal
9 action out there. In 1991 we actually listed
10 it on the Superfund National Priorities
11 List. We actually proposed it in that year,
12 and since then we have been conducting various
13 investigations and other activities
14 there. Next slide.

15 This is the black and white of the
16 Captain's Cove facility (indicating).
17 Captain's Cove was added to the Li Tungsten
18 Superfund site as a result of a discovery that
19 some of the oar tailings or wastage from the
20 oars that were used at Li Tungsten for
21 processing were dumped down the road from Li
22 Tungsten. Li Tungsten is up here, and down
23 here (indicating) is this piece of undeveloped
24 property known as Captain's Cove which
25 dumpings took place of this oar material.

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Other dumpings have occurred here in the past too, but the only ones we were interested in were the Li Tungsten connection.

That made two areas on this Captain's Cove what we call the second phase of Li Tungsten facility or Operable Unit 2.

Operable Unit 1 is the geographical area of the Li Tungsten facility; Operable Unit 2 is the two areas on Captain's Cove where these tailings were deposited. The two areas, one is here and we refer to that as area A (indicating), and this is area G right behind what was a condo shell, both these shells were probably taken down on Earth Day as anyone who lives in Glen Cove or the surrounding area knows.

Those two are the focus of EPA's Operable Unit 2. However, the focus of what we're doing here tonight is for both plans. Both project schedules started dovetailing in the last part of this fiscal year; so we decided to do one proposed plan for both sites. Next slide.

Doug mentioned some EPA removal actions

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1
2 that have taken place, and I also mentioned
3 one that occurred back in 1989 the site owner
4 conducted a removal action, what was
5 considered the most acute health threats were
6 addressed during that action by the Glen Cove
7 Development Corporation.

8 Right on the heels of that we conducted
9 our investigation to see if that site truly
10 merited placement on the National Priorities
11 List in conduct that it did, so we proposed it
12 in 1991.

13 We then conducted another removal action
14 in 1996 through 1998. We took almost two
15 years in which we addressed 271 storage tanks,
16 indoors, outdoors we basically extricated them
17 from inside buildings, cut them open,
18 decommissioned them, decontaminated them, got
19 them off the site. That's Li Tungsten,
20 Operable Unit 1, OU1 is shorthand. Captain's
21 Cove is a little bit of a different story.
22 Like I said, it's pretty much an undeveloped
23 piece of property until the mid '80s a condo
24 development tried to get started there. There
25 were obviously environmental problems for

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building the residential development there, there were also problems with funding, and I guess the two together, basically, the condo development went south. It didn't take off.

In the late '80s, the DEC ordered the site owner, which was called Village Green Realty, it was a subsidiary of a bank in Maryland, just like the Glen Cove Development Corporation was, to do a gamma radiation survey and to try to determine the extent of any dumping of radioactive residuals there.

We then linked the areas of radioactive residuals in around 1985 to the Li Tungsten site and thereby expanded our investigation. The DEC did a follow-up gamma survey with more sophisticated equipment in 1996, and then the DEC conducted a full-blown RI/FS, utilizing the city because the city was a prior owner of that property. So the DEC ordered our RI/FS, Remedial Investigation Facility Study, which just ended this March in a record decision for that state Superfund portion of the site.

Their mandate was to address chemical contamination. Our mandate at Captain's Cove

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1 is to address the radioactive problems. The
2 reason for that split, if you're interested,
3 is under the state's Superfund law, they are
4 not -- I think the reasoning is that
5 radioactive materials are not considered a
6 hazardous substance under their laws, so they
7 are precluded from spending their money on
8 cleanup on radioactive materials. This is
9 where we're filling that gap.
10

11 Elsewhere on that creek there are other
12 Superfund sites. There's a Mattiace site
13 that's a federal Superfund site, that's on an
14 east/west midpoint that lies between Captain's
15 Cove and Li Tungsten, that's also a defunct
16 chemical blending facility, which is a little
17 bit further along in the process of Superfund
18 cleanup. There's actually quite a bit of
19 cleanup that's been done there and treatment
20 plant is actually started up and getting
21 operational between groundwater and soil
22 contamination.

23 Then there's two other state Superfund
24 sites. One is the old Powers Chemco, which is
25 now an operational facility called Konica. It

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1 was on a state Superfund list as Powers Chemco
2 and before that Columbian Ribbon and Ink, in
3 case anyone's interested in the old names and
4 the history. And directly across the street
5 from the Li Tungsten is an old dry cleaning
6 establishment called Crown Dykeman, it's now
7 an auto body place. That was an old
8 laundromat, another state Superfund site.
9
10 Next slide.

11 Okay. The focus of tonight's public
12 meeting is the field investigations for the
13 remedial side of things that you heard Doug
14 talk about at Captain's Cove and Li Tungsten,
15 both operable units.

16 We did surface and subsurface
17 investigations, and after doing these
18 investigations we did a site characterization,
19 nature and extent of site contamination sort
20 of thing. As an example more or less as a
21 list of the sort of techniques and
22 methodologies that we used to try to figure
23 out exactly what got into the environment, we
24 use things called geophysics, soil gas,
25 surface soil samples, and surface water and

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1 sediment samples. We also sampled the oil
2 residuals that were lying about the Li
3 Tungsten site. Next one.
4

5 Those are surface investigations.
6 Beneath the surface we actually do intrusive
7 work like test fittings, source area borings,
8 all different types of borings, borings to see
9 if the storm sewers were leaking, borings to
10 put gamma logs down, find out if there is
11 stuff that's buried subsurface that's
12 radioactive. So you may not have noticed, but
13 we have two poster boards over here, and at
14 some point during the evening, you may want to
15 take a look at the various locations that we
16 have placed some of these -- I guess there's
17 everything up there, not just the intrusive
18 but the surface soils, virtually everything
19 that I just reeled-off is on these.

20 If they were actually the actual size of
21 these documents, the sites would look like
22 swiss cheese. They're actually a lot smaller
23 than that, there are quite a number of them.

24 I think it was extensively studied based on my
25 experience in this program.

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I actually jumped the gun there, we had groundwater investigations too where we evaluated a lot of the existing wells from prior investigations to see if they were useable, if they were, we used them in our codery of wells. We installed new wells where we thought they were needed, and we performed three rounds of groundwater sampling.

Results of the RI/FS and again, this terminology we were calling the Captain's Cove a focus feasibility study, so that's where that comes from, the remedial investigation that was done that was part of Li Tungsten and the focus feasibility study which was really the field work of Captain's Cove, a nuance of the program which is not that important. But anyway, as general results I mean we collected a tremendous load of data, but these are some general statements that I think we can make. Soil contamination categories like PIH's and PCBs, inorganics, heavy metals, radionuclides in general were collocated, that means found in the same place relatively in the same place; that's not always the case,

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but to a large extent that was the case.

The radionuclides of concern which was a couple of isotopes of radium, a couple of isotopes of thorium and uranium 238. They were generally not migrated from the original deposition areas. The radionuclides tend to be sufficiently located at Li Tungsten in the first four feet. At Captain's Cove they range up to a greater depth because they tended to be buried over there, lay down, spread out, buried, piled up on top of, so you might actually go down 12 feet in say area G and find this stuff, 12 to 14 feet. Next slide.

That's for soil, now groundwater the findings: There were groundwater volatile organic compounds, VOC plumes, those are your dry cleaning fluids, TCE, and PCE were found on parcels A and C from off-site sources. Actually, two plumes, Crown Dykeman and Mattiace, localized inorganic contamination was primarily on the southend of parcel C, that was as a result of Li Tungsten activities and there was no significant radionuclide contamination in groundwater.

1 I guess this is a follow-up, this is a
2 sort of follow-up to the groundwater slide.
3 This is Glen Cove's municipal water supply
4 water well locations. Any black dot is an
5 inactive well. These are not active
6 (indicating). The active ones now are this,
7 this and this (indicating). Here's our active
8 one (indicating), and the majority of wells,
9 and also screened in a Lloyd aquifer what
10 we're talking about is the upper glacial at Li
11 Tungsten being affected in a localized
12 manner. Next one.

14 Okay. Now after we have our sampling
15 results and we've crunched the data, and we
16 have it all tabulated, we do something called
17 risk assessment, that's one of the tools we
18 have to try to determine what the numbers
19 mean, if they pose a threat to human health
20 and environment. We also look at standards
21 that are in existence, but mostly from the
22 soil side of things we're looking at risk
23 assessment to a large extent.

24 Anyway, what you do in a risk assessment
25 is you use a certain methodology depending on

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1 what you're dealing with. If you're dealing
2 with -- on this particular site if you're
3 dealing with radionuclides or chemicals, you
4 use different methodologies for dealing with
5 both of those; you then determine on this
6 particular site what your exposure pathways
7 might be; in other words, is there you know,
8 public access to the site; is it something
9 where, you know, people, kids play on it, or
10 maybe like in Love Canal where you build your
11 house on it. Something like that where you
12 could have exposures like thermal absorptions
13 or ingestions. Those are exposure pathways.

14 Then you try to determine potentially
15 exposed populations, again some examples from
16 this: Site trespassers, future site workers.
17 Again, you do a current and future scenario,
18 current scenarios are off-site residents, no
19 one's living on that site, so there are no
20 present residents, but in the future you can
21 say there might be future residents, let's do
22 a future residential scenario where we try to
23 determine where, you know, they would be
24 impacted by what's there at the site; again,
25

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1 assuming no action was taken which we call a
2 baseline risk assessment. Potentially exposed
3 populations, children we evaluated, we
4 evaluated future site workers. We actually
5 did quite a number of scenarios here. Then we
6 developed the risk estimates, which are
7 actually numerical values, which we think of
8 conservatively developed to overestimate the
9 risk to be on the safe side. Next.

11 Gee, I jumped the gun on this. These
12 are some of the potentially exposed
13 populations which we just discussed.

14 Now, for cancer risk EPA looks at this
15 sort of -- This is how EPA evaluates cancer
16 risk. Usually, I'm not sure if people are
17 familiar with 10 to the -4 and 10 to the -6
18 terminology. Essentially it means one case of
19 extra cancer incidence in a million, that
20 equals 10 to the -6 or one in one million
21 risk; 10 to the -4 risk is the other end of
22 the risk assessment range and that's one in
23 10,000 or 10 to the -4. Within that range we
24 evaluate the need for action, sometimes we
25 will do, sometimes we don't, it all depends on

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1
2 other site factors that may influence our
3 decisions. Below the one in a million or the
4 10 to the -6, we don't take any action. We
5 think one in a million extra cancer incidence
6 is a safe number. Again, we don't like to
7 draw right lines in a number, but that
8 generally is the number that we use.

9 Above that, if it's greater than 10 to
10 the -4, there will be remediation evaluated,
11 and we consider it justified above that, if
12 the risks are posed that are greater than that
13 on cancer. Next one.

14 On this particular site too, we have
15 contaminants that pose noncancer hazards.
16 There are other impacts from these sites that
17 are not carcinogenic impacts, you know,
18 systemic effects that aren't cancer but still
19 not good for you. This is evaluated a little
20 bit of a different way. If there's a hazard
21 quotient here, sometimes you see it as hazard
22 index. Hazard indices are typically something
23 that catches your attention and you think that
24 the site maybe posing something in terms of a
25 problem you might have to address, below that

10.0031

1 we consider it to be safe. Below
2
3 one. Next.

4 For this site, just a quick summary of
5 certain collected selected pathways and
6 populations, actually not pathways, but
7 populations, current off-site residents in
8 terms of cancer risks, the numbers are
9 acceptable. Again, using that 10 to the -4
10 and 10 to the -6 as our benchmark for
11 acceptability. Unacceptable trespassers in
12 area B and C, B and C on Li Tungsten, and I'm
13 just realizing that I didn't go over that.

14 Could we go back to the very first slide
15 because I don't think I pointed out A, B and
16 C.? Yeah, parcel A was the one with the
17 buildings that have come down that was the
18 most highly developed portion of the Li
19 Tungsten facility. Parcel B was this
20 undeveloped parcel used for dumping here
21 (indicating), and this was a parking lot again
22 undeveloped (indicating). Parcel C was sort
23 of like this (indicating), and, again, waste
24 treatment here 500 gallon waste storage tank
25 here (indicating), warehouse there and a

10.0032

1 reduction of furnace building here, and this
2 was all underdeveloped woods that was added
3 later. I think Glen Cove Development
4 Corporation bought that sometime late '70s or
5 something like that, but again we're calling
6 this all parcel C, again, B, A, C
7 (indicating).

8
9 So with that in mind, if you trespass in
10 area B and C, that's going to create an
11 unacceptable cancer risk if you do it over the
12 lifetime of a teenager, that's how the risk is
13 developed, teenager being 10 years. If you do
14 that for 10 years, you will have a calculated
15 cancer risk that we consider unacceptable.
16 That means that you might have an additional
17 risk of contracting a cancer of maybe one in
18 10,000 or somewhere in that range of
19 possibility. Future residents whether on
20 Captain's Cove or Li Tungsten unacceptable.
21 Future site workers at Li Tungsten,
22 unacceptable. Next.

23 Summary of noncancer hazard,
24 unacceptable. Well, I'll just read them off
25 current off-site residents, trespassers in

10.0033

1 area B and C, future resident, future site
2 workers at Li Tungsten or future construction
3 workers at Li Tungsten and future construction
4 workers at Captain's Cove. Again, these are
5 not all the risks, these are just certain
6 selected ones based on certain populations
7 that I know some of you are interested in
8 based on the meetings that we have had out
9 here and what-not. Based on the remedial
10 investigation, the subsequent risk assessment
11 and a lot of considerations that have to go
12 into these kinds of decisions, we came up with
13 a list of five parameters for soil and cleanup
14 levels that we think that once achieved will
15 cleanup this site to a level that's compatible
16 with future occupation by commercial
17 development, and the numbers are arsenic 24
18 milligrams per kilogram, lead 400 milligrams
19 per kilogram, Thorium-232 is 5 pCi per gram,
20 Radium-226 is 5 pCi per gram and PCBs, 1
21 milligram per kilogram top two feet and 10
22 milligrams per kilogram below that.
23

24 These are the areas of Li Tungsten that
25 have been primarily identified as a result of

10.0034

1 the remedial investigation and subsequent look
2 at the cleanup levels that are going to
3 require addressing those cross-thatched areas
4 which maybe a little clearer on your handouts,
5 if you're still up to us. So there's maybe a
6 dozen areas that are going to have to be dug
7 out, or at least a dozen.

8
9 Over at Captain's Cove radionuclide
10 contamination has caused you to earmark those
11 particular areas again. Collectively, we call
12 this area A (indicating), that's area G
13 (indicating), the state's focus has been on
14 this part of the site (indicating), and we're
15 basically bookending them on either end of the
16 site. Next.

17 After we have developed our cleanup
18 levels, we look at various ways of achieving
19 them, then compare them to each other to see
20 which ones look like the best possible way to
21 go. On this particular site, we looked at
22 both soil and groundwater alternatives. A lot
23 of times we'll break those out to separate
24 phases, but we kept those together here as
25 well. So we have two sets of alternatives.

10.0035

For soil, we by regulation or by law, I think it's by regulation, we do a no action alternative, which is done as a baseline. Now, some sites we actually do no action, we actually chose that, but we have to do it by law, so it will always be in there. That's called LS1, CS1 that's shorthand for Li Tungsten soil number 1 and Captain's Cove soil number 1. Secondly, the alternative for Li Tungsten and Captain's Cove is excavation for all those cross-hatched areas, obviously you would test to find out what you have, but you would pretty much just dig up those area and dispose of them off-site at appropriate facilities. For the most part, you're probably going to find out that most of the stuff that you dig up in that matter, I would say that more than 50 percent, is going to test over the cleanup numbers for radionuclides, if you don't intend to separate it out.

We will also do selective building demolition depending on the state of the buildings when we get out there. A lot of the

buildings are pretty deteriorated as a result of the abandonment of the facilities. Some of the buildings have already come down, like I mentioned before. Some of the buildings actually get in the way of the remedial action, and in that sense, they may have to be partially or completely dismantled. In any event, we're going to be taking down some of the buildings. Right now we don't have a solid list, but I would say that you're probably going to see parcel A completely down and parcel C, there's two buildings left I'm not sure how they're going to hold up over the next few years.

Institutional controls, basically our cleanup numbers were developed with a commercial scenario in mind, and we don't think that residences should be developed there after our record decision. Next.

Now, we're up to LS 3, CS 3. This introduces the concept of trying to separate out radionuclides because disposal of radionuclides off-site is an expensive proposition, more expensive than disposing of

10.0037

1 chemically hazardous materials. In order to
2 try to make this more of an efficient process,
3 we include a separation process, which could
4 be a technology or construction technique.
5 We're being purposely flexible on that because
6 we want to use the best separation approach
7 that the site warrants, and that might
8 actually vary in some areas; certain areas
9 might require one type of approach, and the
10 other parts of the site might require
11 something a little different. But separation
12 has the potential here, we felt, after looking
13 at the RI results we think there is some
14 separation potential that could be achieved
15 here.

17 Basically what we would do under this
18 alternative then is to dispose of the
19 radionuclides at an off-site facility. We
20 would then stabilize and dispose of what is
21 the chemical bad actor, the nonradioactive but
22 heavy metal contaminated soils that exist both
23 at Captain's Cove and Li Tungsten. We would
24 dispose on of them on Li Tungsten and parcel B
25 in a prepared cell, which would be constructed

10.0038

1
2 in conformance with RECRA Resource
3 Conservation Recovery Act and a line cell with
4 a cap that meets all the hazardous waste
5 specifications that are in RECRA, and also in
6 state law. Again, same building demolition
7 would apply here and institutional controls.

8 For our last alternative we have the
9 excavation with the separation. In this
10 particular case, everything goes off-site.
11 Radionuclides that have been separated out go
12 to a radionuclide separating facility. The
13 heavy metals go to a what they call a subtitle
14 B or C facility depending on whether they pass
15 or fail hazard waste constituency tests, there
16 would be samples for those. We expect most of
17 them to be going to subtitle B facility, which
18 is the lesser of the two. Again, building
19 demolition and institutional controls.

20 On the groundwater side of things, our
21 first alternative is the same, no action.
22 We're monitoring out there now and we would
23 continue that monitoring on some, probably
24 like a six-month to an annual basis, just to
25 see how groundwater is developing in terms of

10.0039

the movement contamination and whatever.

The second alternative is I guess a version of your standard pump and treat -- maybe not standard because you're using intercepted trenches, which is a fancy word for trench drains, those would be booked in the local extraction wells in areas where we think the contamination is a little bit deeper. It would be treated, it would be pumped and treated onto an on-site package unit, and it would be reinjected probably somewhere in the vicinity of parcel B. Next.

The third alternative for groundwater is again the interceptor trenches with flow extraction, again, the only difference here is we would pump whatever we're getting out of the ground up to the Mattiace treatment facility, which is just starting up, and that would be reinjected just north of the facility where the reinjection gallery is now located.

The last alternative for groundwater is the reactive wall, which is an innovative new technology that sort of resembles a slurry wall. Groundwater collects at certain points

10.0040

1 at the wall and is chemically treated by a
2 chemical matrix, which basically removes the
3 materials, then the cleansed groundwater flows
4 to the other side of the wall, a fancy fill
5 filter. In certain spots we would do in-well
6 absorption in a couple of high-hit arsenic
7 wells that are in lower parcel C.
8

9 Okay. Those are all the alternatives.
10 These are the nine evaluation criteria that we
11 used to evaluate I'll read them: Protection
12 of human health and environment; compliance
13 with our standards or the state standards that
14 we're operating in the State of New York;
15 number three is long term effectiveness and
16 permanence, that's a plus. If it reduces the
17 contaminant toxicity, mobility of volume,
18 short-term effectiveness, whether it's
19 implementable or not -- you might come up with
20 a great idea, but there's no way you're going
21 to get it implemented in real time; how much
22 the thing cost and whether it's acceptable to
23 both the state and community.

24 With that, the remedy that we've put
25 into the proposed plan that we're seeking

10.0041

1 public comment on and that we're proposing
2 tonight is the fourth soil alternative, which
3 is digging out all the cross-thatched area,
4 separating radionuclides from heavy metals
5 where they coexist to the extent possible,
6 then disposing of the radionuclide
7 contaminated material in a place that will
8 take it, and disposing of the heavy metal
9 contamination at a chemical waste handling
10 facility, or subtitle D facility, which again
11 that will be probably much closer to the place
12 that we're thinking of right now for the
13 radionuclides. The one that I guess people
14 know about is the Envirocare, but that doesn't
15 necessarily have to be the one that gets this,
16 but at the time we seek to dispose of this
17 stuff, if that's the best price and the best
18 operation going then that's who's going to
19 take it. In other words, you know, we're open
20 to whoever is in the business to take this.

22 We're going to be taking down buildings.
23 I think in the proposed plan we pretty much
24 say everything on parcel A will come down as a
25 result of the structural instabilities that

10.0042

1
2 exist in these buildings. They're getting
3 more dangerous by the week in terms of people
4 that are walking around out there, which
5 hopefully nobody is out there right now, but
6 when we go out there to work, people will not
7 want to be near them.

8 Institutional controls, as a result we
9 want to see both of these properties, both Li
10 Tungsten and Captain's Cove being used not for
11 residential development but for commercial
12 future uses, and I think the State of New York
13 is also requiring the same thing
14 as their record of decision stated in March of
15 1999 for the Captains's Cove portion of this;
16 so I think -- actually we'll have to further
17 investigate that -- but I think that
18 particular property will not require
19 additional actions from us because it's
20 already being in place by the state.

21 For groundwater, we are choosing no
22 action, will continue monitoring because we
23 feel that the cleanup of materials that are
24 causing the groundwater problem as far as the
25 heavy metals, again, the heavy metal

10.0043

1
2 contaminations, groundwater right now is
3 pretty isolated, localized parcel C, maybe a
4 couple wells on parcel A, but for the most
5 part not what we consider a high level threat.

6 The groundwater is not used presently
7 for potable water. It's the upper glacial
8 aquifer we're talking about. There's probably
9 20 feet of raritan clay between that aquifer
10 and the drinking water aquifer below. And the
11 amount of contamination again is fairly
12 localized and should dissipate to the
13 beneficial best use of the aquifer in a
14 quickenened accelerated fashion once you take
15 away the source, which is the overlying
16 residuals and other stuff that we're going to
17 be taking out part of LS 4, CS 4.

18 I guess that's about it. We still have
19 cost. And the cost for the remedy estimated
20 including construction contingencies, design
21 cost and operation and maintenance for the
22 groundwater portion, \$28,000,000 and the
23 operation and maintenance is \$32,000 a year
24 for a grand total 30-year present worth of
25 \$28,764,000, almost \$29,000,000. And that

10.0044

concludes the presentation as far as what the plan is all about. Now I guess we open it up to question and answers.

MS. ECHOLS: If anyone has a question that can come to a mike in the middle of the room or you can stand at your seat and just state your name as loud as possible for the stenographer. We would like to open up the floor for questions.

COUNCILMAN GONZALEZ: My name is Steve Gonzalez. I'm City Councilman of the City of Glen Cove, and I'm a member of the Li Tungsten Task Force. My question on the last time you talked about the cost being approximately \$29,000,000; how much funding is available from the EPA for the city in terms of that funding?

MR. ALS: The funding?

COUNCILMAN. GONZALEZ: For that cost, how much is available of the EPA funding for that cost of the cleanup?

MR. GARBARINI: How much EPA funding is available?

COUNCILMAN GONZALEZ: Yes?

10.0045

1
2 MR. GARBARINI: As I said, tried to
3 mention in my presentation, the first thing we
4 would do in most cases and I did plan to
5 actually say something about that. But
6 usually after the record of decision is
7 signed, we go after those parties that are
8 responsible for the contamination and try to
9 get them to fund or perform the cleanup of the
10 remedy. For instance, that's pretty much what
11 we plan to do here, except there is a small
12 portion of the work, Phase 1, which we're
13 trying to see if we can actually get Phase 1
14 of the work performed in an expedited way.
15 And that phase of the work, if we do it this
16 way, would be funded by EPA and it would just
17 include work on the southern half of Li
18 Tungsten facility.

19 COUNCILMAN GONZALEZ: How much would
20 that be?

21 MR. GARBARINI: I think we were
22 estimating a million and-a-half to two million
23 dollars. From that, the bulk of the funding
24 we will solicit from responsible parties.

25 COUNCILMAN GONZALEZ: How many

10.0046

1 responsible parties are there? I think I know
2 a few of them.

3
4 MR. GARVEY: I'm Carl Garvey, one of two
5 of the EPA Region 2 attorneys working on the
6 site, and how much, how many potential
7 responsible parties.

8 COUNCILMAN GONZALEZ: And the names of
9 the parties.

10 MR. GARVEY: There are approximately 30
11 that we have identified to date. We are
12 authorized under the Superfund statute to
13 identify parties who were owners of the site
14 at the time the waste was disposed of,
15 operator of the facilities for which the waste
16 was released, transporters of the waste to the
17 ultimate destination and generators of the
18 hazardous waste. Basically four classes of
19 responsible parties.

20 We have with exception of the
21 transporters -- which, this site we don't
22 believe there were any at any point -- we have
23 parties, we have former operators, Melting and
24 Refining Corporation of America, which was
25 actually, that was actually prior to the Glen

10.0047

1
2 Cove Development Company's ownership of the Li
3 Tungsten facility they were the owners of
4 record. That's an example of an owner we have
5 identified and notified them as a potential
6 responsible party, the former operator of the
7 facility. We did notify Li Tungsten
8 Corporation, I think we did, although as many
9 people may know it's a defunct corporation
10 through bankruptcy. We notified John Li, the
11 former president, who is now deceased. We
12 notified Teledyne, Inc. a former operator.

13 Then we move into the realm of
14 generators. I think for the most part the
15 operators of the site are also considered to
16 be generators, and we have also identified I
17 guess at this point 21 or 22, the bulk of the
18 30 parties are parties who we believe
19 generated the waste at least directly through
20 arrangements they made with Li Tungsten or Li
21 Tungsten predecessor Watchedge Corporations,
22 going back to 1942, the beginning of the
23 facility. They made arrangements for the
24 facility operators to process Li Tungsten or
25 scrap Li Tungsten and a variety of metals,

10.0048

1 primarily Li Tungsten oils. We believe the
2 source of the radionuclide waste, but through
3 these arrangements and processing and
4 returning to the suppliers the pure product in
5 that raw material by virtue of those
6 arrangements, we have identified say 22, just
7 slightly rough figures, 22 of those as
8 generators, we call them arrangers, generators
9 and intercepting the statute.
10

11 So that kind of gives you an overview of
12 who's out there. We're still looking. I
13 think we'll look to the very bitter end.

14 I should also mention that we have
15 notified the City of Glen Cove, their
16 liability for at least the Captain's Cove
17 portion of this site by virtue of what we
18 believe to be their operation -- whether
19 direct or indirect operation -- of a landfill,
20 which we believe the city owned part of that
21 or operated part of that during the time that
22 some of this radioactive waste was deposited
23 there. We also notified Nassau County that we
24 believe to be a responsible party as an owner
25 during the same period of the same portions of

10.0049

the two municipalities, the city and the county. We believe that their liability should be focused just with Captain's Cove.

As you can see, the process that we have gone through a unique formula for the site, but you could calculate the cost of each.

COUNCILMAN GONZALEZ: When would those costs be assessed with in terms of the city's liability; do you have those numbers now?

MR. GARVEY: No. We're really expecting the Superfund sites now to work together to iron the process out.

COUNCILMAN GONZALEZ: Have steps been taken currently to go after the involved parties?

MR. GARVEY: We have been in contact with many of them, we solicited information, comments on the proposed plan. We generally wait to work out an arrangement by which they would participate until after all the settlements were released.

COUNCILMAN GONZALEZ: Thank you.

MS. ECHOLS: Next speaker.

MS. SLATER: Nancy Slater. Can you give

10.0050

1
2 us a realistic time frame of how long it takes
3 for you to collect the money, whatever the
4 process is, I'm not really interested in, I
5 would assume it's like a claim like an
6 insurance claim whatever; what does it take to
7 collect that money and get going on the
8 project; what is the realistic time frame of
9 what you have projected of your
10 \$28,000,000-\$29,000,000 project, except for
11 the groundwater?

12 MR. DOYLE: I'll let them let them
13 answer that question.

14 MR. GARVEY: As far as the timetable,
15 just so you understand, our the approach is
16 for us to after the decision's made and the
17 remedy's selected, we would contact the
18 parties notified, and we would ask them to
19 fund it themselves; that's why how much money
20 -- we have a lot of authority. It wouldn't be
21 come in and volunteer out of the goodness of
22 your heart. We could always sue them later,
23 but, Are you going to do it? If they don't,
24 we have the authority to sue them; so there
25 are incentives there. We would ask them to

10.0051

1
2 come in.

3 Your question about where the EPA has
4 \$28,000,000 sitting in one account waiting to
5 do this work, now, that's not the way we
6 operate. If we were to have to go and get
7 that money to do the work, we could tap into
8 our resources. It's not clear where we need
9 to do that. So, the answer to the question
10 how long would it take to implement the
11 remedy, we're not going to be suing them to
12 get money from them necessarily; we would be
13 asking them to get money to do that, and we
14 would never have to spend money to do that
15 ourselves.

16 MS. SLATER: But surely there's a time
17 frame for that. You just don't send them a
18 letter and wait until never for them to
19 respond.

20 MR. GARVEY: Okay. Once the remedy's
21 selected, which would be in a couple months,
22 we send out notice letters saying please come
23 in, and dispatching sets out a four-month
24 period to negotiate with them to determine
25 whether they're willing or unwilling to do the

10.0052

work.

At the end of that four-month period, you have to sign up or not sign up. If they sign up, we then start the process of cleaning it up from that point forward. If they don't sign up and the government has to make a decision whether we're going to order them to do it, whether we're going to do it ourselves with our own money, if it's available; if we order them to do it and they refuse to do it, we make them go to court to enforce that. So it's not a cut and dry answer. There are enforcement decisions that have to be made.

If the process goes as most Superfund sites tend to go, there will be a four-month period of negotiating, and then if parties sign up to do the work, there would be roughly another two to three-four months to get that settlement finalized in the courts. It has to be entered with a judge. During that period the design of the remedy should start. So the next question is: I don't know how long the design and implement schedule are.

MR. GARBARINI: We think this will be a

10.0053

1 relatively simple job aside from getting into
2 the separation of the material.

3 Typically, if you were to take that
4 aspect of the project and get rid of it, it's
5 really dig and haul, dig and haul. Just go in
6 there start the separation of material.

7
8 Now, we want to make sure that we can
9 reduce the volume that is there that is
10 radioactive; so that will take a little bit of
11 effort. So what we will be hoping to do here
12 is to expedite the design and try to move
13 forward. Typically we allow maybe a year to a
14 year and-a-half design. We're not really
15 going to allow that here. In the best of all
16 worlds sometime 2001. Whether that is going
17 to happen or not a lot depends on the
18 responsible parties; sometimes they're going
19 to do work up front say after the settlement
20 is signed up on by all responsible
21 parties. Sometimes responsible parties are
22 willing to start work up ahead of that
23 process. We'll do everything we can to try
24 and expedite that. It's not a short process.
25 We're shooting for 2001. If we phase the

10.0054

1
2 work, as I had mentioned earlier, and deal
3 with the second-half of the Li Tungsten
4 facility using the EPA's trust funds, then we
5 hope to be out there sometime next year, early
6 next year doing the work.

7 **MAYOR SUOZZI:** The citizens are trying
8 to make this process happen as quickly as
9 possible. If the parties wind up getting
10 involved in a long drawn-out legal battle, it
11 could take as much as three to five years.
12 You pointed out sort of a rosy projection.
13 Our projective is 2001 is possible, it's
14 unlikely based on the success of other
15 communities. Let me point out there are also
16 some federal agencies that are potentially
17 responsible parties on the site as well.

18 **MR. GARVEY:** The mayor is absolutely
19 right. I meant to mention this earlier.
20 There are three federal agencies that are
21 potentially responsible parties. We have
22 identified the General Service Administration,
23 GSA, as a former owner. They actually owned
24 the facility, the land on which the facility
25 was built in '42. We have identified the

10.0055

1
2 Departments of Commerce and the Department of
3 Treasury as two former operators, in
4 particularly their World War II years of the
5 plant in operating of the plant in conjunction
6 of the Li family predecessor. So there are
7 three more parties.

8 MR. GARBARINI: One more thing of the
9 this first phase that we were talking about.
10 The other key element there is we need to
11 secure funding from our headquarters down in
12 Washington. If we were to do the work and
13 we're in competition with a lot of other sites
14 throughout the country so the agency's policy
15 is to cleanup the worst sites first. So
16 basically what we have to do is go through our
17 Legal Active Prioritization Panel and
18 basically document the problems that the site
19 poses and the reasons why we want to move
20 ahead quickly with this action, basically, and
21 then put that into a pool of all these other
22 sites and battle it out, and try to get some
23 funds. So the funding is not yet secure for
24 that phase of the work, and that's why it's a
25 little tentative.

10.0056

1
2 MR. DOYLE: If that funding is available
3 and we do it while that first phase is being
4 done by us, the process that I talked about
5 will be ongoing so that there will be a
6 sequential, by the time we're done with our
7 phase, we'll hope to have the private parties
8 and the federal parties and the county and the
9 city and whoever else can pick up wherever we
10 leave off, so there won't be a lag.

11 MS. ECHOLS: Any more questions? Sir.

12 DR. SPIZER: Good evening, my name is
13 Dr. Roy Spizer. I've been a member of the Li
14 Tungsten Task Force. I've been involved with
15 some of the site for I'd say well over 11
16 years.

17 I was originally appointed to the
18 Environmental Advisories Counsel about 12
19 years ago when we were initially involved in
20 locating these sites.

21 There are several issues I'd like to
22 address, and I have concerns and questions
23 about regarding certain criteria. The
24 criteria I'm concerned about are one the
25 long-term effect of the permanency remediation

10.0057

1 effort. Also I'm concerned about the
2 protection to the human health and the
3 acceptability to the community.
4

5 The Li Tungsten site is a toxic legacy
6 that needs to be limited not just reduced.

7 The types of materials that are on this site,
8 radionuclides, uranium, radium and thorium
9 present some very different problems and pose
10 some potential health hazards in the cleanup
11 process.

12 We've talked about the risk of the site
13 itself having a certain cancer risk, which is
14 not unacceptably high, but in some cases if
15 there is development, it will be unacceptably
16 high. But I think there's a bigger concern
17 about the possible risk to our health in the
18 actual cleanup process.

19 One of the things about the site that is
20 somewhat unique is there's radioactive uranium
21 on the site, and I got some information from
22 the DEC for the toxic substances and disease
23 remedy. It's a little bit dated, it's 1990,
24 but they state in there that uranium, they
25 talk about uranium to emphasize that human

10.0058

1 health affects may result from exposure to it.
2 The Environmental Protection Agency has
3 identified 1,177 sites -- obviously it's more
4 now -- 1,177 sites on its National Priorities
5 List. Uranium has been found low background
6 levels on only 26 of these sites, that's about
7 two percent. Now, the information that they
8 present in here is important because uranium
9 may cause harmful health effects and both of
10 these sites are potential sources of human
11 exposure to uranium.
12

13 I would like for us to first address, I
14 read the RI/FS and I have questions and
15 concerns about the decision about the
16 preferred cleanup options. Cleanup options
17 that are preferred, LS 1 and LS 4 versus
18 cleanup options LS 2 and 3 because LS 2 and CS
19 2 will eliminate all the contamination without
20 separation versus an excavation and separation
21 and disposal of some of the material on-site.

22 In the RI/FS for Li Tungsten and
23 Captain's Cove's, the EPA's consultant's
24 language clearly makes cleanup options LS 2
25 and CS 2 better for human health than LS 3 and

10.0059

1 4 or CS 3 or 4. In section 4222 under the
2 heading assessment regarding overall
3 protection of human health and the environment
4 it states, quote, Protection of human health
5 and the environment is achieved by removing
6 contaminants, sediments and/or residues above
7 the PRGs for site treatment and disposal. The
8 uncontrolled nature of the contamination from
9 this site will be eliminated by transferring
10 the contaminated media to appropriate disposal
11 facilities. So in this heading, assessment,
12 the EPA's own consultants recommended that
13 there be complete removal of toxic waste from
14 the site. Again, let me repeat that:
15 Removing all the contaminants because of their
16 uncontrolled nature.
17

18 There is an omission in the RI/FS, a
19 condition in the disposal of the site was
20 haphazard leaving some measure of
21 unpredictable impact; therefore, the best way
22 to deal with uncontrolled pollution is to
23 eliminate it.

24 In the RI/FS the consultant's language
25 clearly makes LS 2 better for human health

10.0060

than LS 3 or 4. All other criteria were not considered if this one fails. If the EPA doesn't remove all the contamination from the site there will still be some indirect contact with radioactive waste at the site. Simply put: If they do not remove all the radioactive waste, this is not going to be an adequate cleanup.

In section 4232 under the heading long-term effectiveness and permanence, the consultants state that LS 3 and 4 has serious problems because of, quote, existence of contaminant cells in populated areas; however, could possibly result in some compromises to the long-term effectiveness to this alternative. Long-term monitoring of groundwater and surface water would allow assessment of containment systems' long-term efficacy.

There are problems that may arise or are associated with the cell. We question this long-term effectiveness because this may not be a stable method and the contaminants may not remain contained. Furthermore, this

10.0061

requires continued cost of laboratory testing and consultants, and, if in the future any of these tests fail or if cleanup standards change, the case could be reopened.

Therefore, LS 3, according to the RI/FS, is not the best solution.

Furthermore, regarding safety -- protection of our safety and health, there's an absolute need to remove and dispose of all the radioactive waste with the utmost safety precautions and procedures. The Glen Cove community cannot tolerate any migration of radioactive fallout off-site. Migration of radioactive dust or fugitive dust will contaminate the surrounding area of a greater degree that might be inhaled or ingested.

Radioactive uranium, Thorium or radium, do not have -- in the air uranium does not have a maximum allowable concentration level; so the only safe level is absolutely 0, since humans cannot tolerate any exposure.

Uranium and the other radionuclides emit gamma radiation, which is very high energy, in about 10 to 100 times higher than energy than

10.0062

1
2 x-rays. Like x-rays, these gamma emissions
3 penetrate very effectively.

4 Beta rays are also emitted by this type
5 of radioactive material, but we think the area
6 can be shielded. However, beta radiation
7 becomes a hazard if the radioactive pattern
8 enters into the body either through inhalation
9 or ingestion. This will bring the radioactive
10 pattern into contact within the tissue of the
11 intestines or lungs. If the radioactivity
12 enters into the intestines, it can be absorbed
13 by the body and the body thinks this metal is
14 like calcium, and deposits them in the bones.
15 This is very dangerous as it puts the
16 radioactive material in the immediate vicinity
17 of the bone marrow, where red and white blood
18 cells are being produced.

19 The most dangerous route for beta
20 emissions is through the lungs. If
21 radioactive betas are deposited into the
22 lungs, it can cause a great deal of damage to
23 a few cells. The biological effects of this
24 type of radiation to the body, even one
25 exposure, is that it might cause malignant

10.0063

1 lung tumors. It can also cause mutations,
2 and, in pregnant women, this type of exposure
3 can cause birth defects or death to the fetus.
4 Inhalation of alpha, beta or gamma emissions
5 certainly increases the risk of lung cancer
6 and other types of cancer. Also exposure to
7 the gamma rays will increase the certain types
8 of cancer.
9

10 Therefore what assurances do we have
11 that the safety procedures that the EPA
12 perform, or the responsible parties will
13 perform on the cleanup of the site will
14 protect us from off-site emissions from this
15 radioactive dust?

16 In conclusion, we cannot place anyone's
17 life in jeopardy for the cleanup of this site.
18 Migration of the radioactivity must not be
19 left to chance, and I strongly urge all the
20 parties, the EPA and the responsibility
21 parties, to place the health and safety of the
22 people of Glen Cove above all other monetary
23 and other considerations, and give the highest
24 priority to safely removing all radioactive
25 material and not cause any fugitive dust to

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1
2 migrate off-site. This could be accomplished
3 by placing protective structures or barriers
4 around the active cleaning area to prevent any
5 great amount of dust from migrating
6 off-site.

7 Finally, I urge the EPA to revise the
8 cleanup plan and recommend remedial actions LS
9 2 and CS 2 as the best cleanup possible.

10 MR. GARBARINI: That was LS 4 would not
11 be in the cell.

12 DR. SPIZER: That's still considered an
13 option at this point?

14 MR. GARBARINI: The remedy we are
15 proposing tonight doesn't have a containment
16 cell.

17 DR. SPIZER: It changed from the last
18 meeting that LS 3 had a containment cell?
19 There is no containment cell on site?

20 MR. GARBARINI: That's correct.

21 DR. SPIZER: The nonradioactive material
22 will be left on site?

23 MR. GARBARINI: That would also go
24 off-site. You do raise a legitimate concern.
25 It's a fact that we have to deal with at all

10.0065

1 our excavation sites. We have done it
2 successfully at our other sites. At Li
3 Tungsten we have special commissions but it's
4 my understanding -- just brief -- that some of
5 the separation technology such as it is, has
6 been used in populated areas, and the work was
7 able to proceed safely

8
9 DR. SPIZER: What monitoring has been
10 done on those sites, and have there been any
11 studies on the short-term and long-term
12 impacts of these cleanups in terms of cancer
13 and any other morbidity and mortality?

14 MR. GARBARINI: I don't think we're
15 prepared to discuss that tonight, and we can
16 certainly respond at the next meeting. Maybe
17 Ed can bring this up with you.

18 DR. SPIZER: This is one of our
19 concerns. I called the Center for Disease
20 Control and I spoke to the ADSDR and they're
21 not aware of any studies on radioactive
22 cleanup sites as far as safety, radioactive
23 risk assessment, and they have done studies in
24 uranium mines where the miners have mined ore,
25 and, yes, there are impacts also from radon is

10.0066

1 an impact. But I don't know if just wetting
2 down the material and shaking it up and the
3 digging up, excavating it and dumping it into
4 a truck. There's a lot of movement, a lot of
5 dust created, you're down on the area near the
6 water. We get very windy up there, so this is
7 a very critical issue that I think you have to
8 give strong consideration to every statement
9 that I made, and again for the reasons I
10 stated, I think LS 2 is the better option.

11
12 MR. GARBARINI: We appreciate your
13 comments. We advocate the use of giving
14 consideration of the sites, the direction the
15 wind is coming from, actually putting
16 structures over different units while we're
17 pressing dust over those units. So we do
18 appreciate your comments.

19 The one thing I do want to mention to
20 you, you talked about and that is a criteria
21 that we call a threshold criteria. We believe
22 that in LS 4 we are achieving that
23 requirement. However, nonetheless I think you
24 make very good points, and we will give them
25 very serious consideration.

10.0067

1
2 DR. SPIZER: One last question from the
3 separation process you're not certain to the
4 exact cost of this. Right now it's estimated
5 my understanding there might be a pilot study
6 first, so in actuality the cost differential
7 may not be as great as is stated in the
8 proposal. If there are problems associated
9 with the separation, it could be higher cost
10 than was estimated.

11 Cost is one issue, and but when it comes
12 to health and safety cost should take a back
13 seat.

14 MR. GARBARINI: That is our criteria we
15 have set up, and we believe first and foremost
16 is the protection of human health and safety,
17 the environment and then the next set of five,
18 cost, which is one of them, they're called
19 balancing criteria. They're the weight of
20 trail using those five. Then you have the
21 final modifying criteria, which are community
22 acceptance and state acceptance.

23 DR. SPIZER: Thank you.

24 MR. FOSTER: Robert Foster, Campaign for
25 the Environment. I have a question and a

10.0068

1 couple of comments. And I question also first
2 a point of clarification.
3

4 Although the EPA has named their
5 research alternatives, the other alternatives
6 are still under consideration?

7 MR. GARBARINI: That's correct.

8 MR. FOSTER: It's been requested before,
9 but can the public comment period, has it
10 already been extended an additional 30 days?

11 MR. GARBARINI: We've actually had a
12 request for an extended comment period, and we
13 actually had set up a date of September 17th,
14 which is an additional three weeks. We hope
15 that that will be satisfactory.

16 MR. FOSTER: The soil cleanup remedy
17 talks mainly about radiological and metal
18 contamination, but it's mentioned in the
19 remedial investigation of the soils of the Li
20 Tungsten site, that semi-volatile inorganic
21 compounds were found dangerous standards in at
22 least one location; so I'm not sure how those
23 are being addressed in the cleanup plan, and I
24 would request that the semi-volatiles
25 inorganics would be addressed as part of the

10.0069

cleanup plan.

MR. GARBARINI: When you use the term standards there, there really aren't standards that we use for soils. What we do look at is the risks that the contaminants in the soils pose to future people using the site. We also look across from contamination of the soil to the contamination of the groundwater.

MR. FOSTER: How are the semi-volatiles being addressed?

MR. GARBARINI: We did have, should have on parcel A that you're talking those higher levels are pretty much operations on the site that occurred during the turn of the century when they were doing a lot of coal and given the fact that that activity did take place, we frequently find these sorts of contaminants associated with coal and even barbecue pits, and the future land use for that site was commercial-industrial, the agency went back to its alternative risk numbers for that future use of the site, and that's how we looked at the PE contaminations.

MR. FOSTER: I guess then I have a

10.0070

comment which is to make it a concern and remediate at least the highest parts of the semi-volatile organic compounds.

As far as the preferred remedy goes, I agree especially with the previous speaker CS 2 and LS 2 and LS 4 and CS 4. It's our understanding that there will be a separation of the radiological from the nonradiological and that separation technique will constitute radiological components in one pile -- so to speak -- and the lesser radiological components in another pile, but there still will be some relatively less nonradioactive pile; that pile will then be separated into nonmetal contaminated and metal contaminated, once again, that separation technique is not perfect, and the noncontaminated part will have some metal contamination associated with it.

By removing all the off-site you not only reduce the total amount of metal on site, but also the total amount of radiological contamination on-site; so we would research that alternative as far as meeting the

10.0071

1 threshold of protection of human health, the
2 LS 4 meets the threshold of protection of
3 human health. As the previous commentator
4 stated, LS 2 and CS 2 surpass LS 4 and CS 4 in
5 their protection of human health, even though
6 LS 4 and CS 4 meet it. I would also state a
7 preference for LS 2 and CS 2 for soil
8 remediation strategy.
9

10 **MR. MACERONE:** John Macerone, City of
11 Glen Cove. One of the things that's been
12 discussed is that the potential for the
13 property will be commercial redevelopment and
14 not residential, and you mentioned some
15 standards. The federal government sets those
16 standards. Have there been any other sites in
17 the United States in this 1,500 or so sites
18 that there are where similar contamination has
19 existed and these thresholds have been met? I
20 want to get a feeling as to where and to how
21 these thresholds come up with and what the
22 difference between a cleanup from a commercial
23 standpoint all the way down to a residential
24 standpoint; is it significant difference?
25

MR. GARBARINI: It really depends on the

10.0072

specific contaminants.

MR. MACERONE: Which contaminants?

MR. GARBARINI: If you're talking about the radiological contamination, there really would not be that much of a difference, I don't believe, between the commercial cleanup and the residential cleanup numbers.

MR. ALS: Not dramatically.

MR. MACERONE: Not a dramatic?

MR. ALS: You can't go much lower.

MR. MACERONE: Then why wouldn't we clean it up to say a pristine point; it cost a lot more money if the threshold --

MR. GARBARINI: -- I think the discussion was pretty much related to a different type of contaminant.

MR. MACERONE: I understand that.

MR. GARBARINI: In that instance, yes, we would have to do a decent amount of more cleanup on that parcel.

MR. MACERONE: From a financial standpoint, how much money?

MR. GARBARINI: I'm not sure if we could respond to that. I think we --

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2 MR. ALS: -- I'm asking our consultants
3 if they know off the top of their heads rough
4 guess on parcel A dimensions.

5 MR. GARBARINI: If you don't know we can
6 respond to that later.

7 MR. MCGRATH: I don't know off the top
8 of my head.

9 MR. MACERONE: The reason I ask is, when
10 I look at the proposal for the groundwater,
11 one of the things that is a reoccurring theme
12 is meeting the threshold for human health and
13 the proposed solution is LW 1, which is no
14 action. It's my understanding from doing a
15 little research that the goal of that is the
16 groundwater is contaminated because of the
17 soil that exists on the site and hopefully if
18 we remove that, the groundwater will be
19 eventually cleaned up.

20 MR. GARBARINI: Right. Because of the
21 localization of the contamination.

22 MR. MACERONE: But from the cost
23 effectiveness standpoint, when I look at the
24 possibilities, we're talking about \$722,000
25 for LW 1. When you look at LW 3 and LW 4,

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2 going to be actually cleaning the water on the
3 site, where with LW 3 you would already take
4 that to another Superfund site very close to
5 where we're talking about, Mattiace. It would
6 only be \$500,000 more.

7 In a \$29,000,000 project, I would want
8 if we're spending that much money, and
9 obviously the city's going to be involved, and
10 the federal government's going to be involved,
11 let the EPA consider that \$500,000 doesn't
12 seem like a lot and five years from now,
13 again, I don't know, I don't think anyone up
14 here or even your consultants can tell me for
15 certain that in five years that water will be
16 cleaned up below the standards. So it seems
17 to me if we're going to do it, we should do it
18 now, so that in five years from now we don't
19 have that problem. And is the EPA considering
20 that?

21 MR. GARBARINI: We will certainly
22 consider it. We have considered it. I think
23 part of the thinking is, with this alternative
24 is that we would continue to monitor, and if
25 our estimates that the significant removal,

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1
2 cleaning the soils for very low levels for the
3 inorganics, and these are the contaminants
4 that are showing up in the soil by going down,
5 taking the extra effort to achieve a low soil,
6 the groundwater could cleanup pretty quickly.
7 Like you said, it does not cost so much more
8 and especially with inorganics you go in and
9 remove the source, the groundwater does clean
10 itself up pretty quickly given that this is a
11 localized hot-spot situation.

12 MR. MACERONE: Let me ask you this then
13 with regard to the implementation of the plan:
14 Would financially it be easier if both plans
15 were done simultaneously as opposed to say we
16 come back five years from now and the
17 groundwater isn't cleaned-up to what you say
18 health-levels, would this 1.2 million dollars
19 be significantly more because all the other
20 work has been done, the soil's been replaced,
21 the buildings knocked down?

22 MR. GARBARINI: Yeah. With inflation, it
23 would be probably a little more costly. The
24 other thing that we do at other sites which we
25 might want to add language here to make it a

10.0077

1
2 little more forceful as a contingency remedy
3 if we do not find the groundwater is cleaning
4 itself up, perhaps kick in a contingency which
5 could be one of these other alternatives.

6 Bring your comments back to the office and
7 give them some consideration. You talk about
8 \$700,000, that's someone's money so we have to
9 give it some thought.

10 MR. MACERONE: It is \$700,000, but in
11 the scheme of things it's actually \$500,000
12 out of \$29,000,000. When you look at this
13 proposal, it's \$500,000 and out of the four
14 proposals, one is no action and the other two
15 talk about that specific proposal, and you
16 mention this building and these sites have
17 been closed since '84. The fact that they
18 have been closed and the fact that Mr. Als
19 mentioned and this I happened to be on the
20 city counsel when this became a Superfund
21 site, and that's been 12 years, and that
22 property has not brought much money to the
23 City of Glen Cove and its citizens; in fact,
24 it's cost them a lot of money. So, I want to
25 make sure that if you're going to do it and

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2 spend \$29,000,000, you're going to do it
3 right. You're right, \$500,000 is a lot of
4 money, but when it's 30 people and its the
5 Federal Government, the City of Glen Cove, the
6 County of Nassau, the State of New York, if
7 you're going to do it, I would hope that you
8 were going to do it the right way. Maybe
9 \$500,000 seems a lot to you, but it's cost the
10 city a lot more than \$500,000 over the last 15
11 years, and if we don't do it right, it's going
12 to cost our taxpayers a lot more in costs and
13 possibly in health risks.

14 MR. GARBARINI: That's part of the
15 dialogue of coming out to speak to you. We'll
16 certainly consider your comments.

17 MR. WARNER: Len Warner. There are
18 State of New York DEC guidelines for
19 semi-volatile, and we calculated an additional
20 8,350 cubic yards to be excavated in parcel A
21 if it was chosen to meet those guidelines and
22 the cost that we estimated for excavation and
23 disposal of the 8,350 yards was about
24 \$4,500,000.

25 MR. MACERONE: So close to \$4,500,000 to

10.0079

1
2 cleanup to a pristine piece of property, to
3 meet residential standards?

4 MR. WARNER: I don't know if they really
5 describe them as residential guidelines.
6 They're cleanup guidelines that they have
7 developed and they work in certain situations
8 where they are appropriate to use them.

9 In the case of the semi-volatile
10 contamination of the EPA's risk assessment --
11 (Audience interruption) -- I was just making a
12 note and on parcel A there are some
13 semi-volatile contaminants and one of the
14 things we looked at in doing the feasibility
15 studies when we looked at the guideline for
16 semi-volatiles, we came up with a number of
17 about 8,350 cubic yards of semi-volatile
18 contaminated soil, if you were strictly
19 following the state guidelines. I think it's
20 important to note that the EPA's risk
21 assessment indicated that even though the
22 semi-volatiles were present in the state
23 guidelines, they did not feel that they would
24 pose a risk to future industrial workers on
25 parcel A.

10.0080

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2 So, in this case, I don't think it's
3 necessarily appropriate to say that the DEC
4 guidelines or residential standards or
5 nonresidential standards, they're a set of
6 guidelines that were developed, and there's so
7 many different standards and usages, I think
8 it's important not to get confused or
9 mischaracterized.

10 The cost that we estimated for disposing
11 of that material if it was chosen, was about
12 \$4,500,000 extra.

13 MR. BALLVE: I just wants to introduce
14 myself, my name is Marcello Ballve. I'm a
15 Newsday reporter. I don't usually cover this
16 area, but I will be writing a story, and I
17 wanted to give out my phone number in case
18 anybody here wanted to contact me, and, you
19 know, express any concern or anything. The
20 phone number's 843-2700, and you can just ask
21 for me and I'll be there.

22 I did have one question for the panel,
23 and I know this might be outside of what you
24 guys had to look at since it was probably
25 radioactive waste or whatever that you were

10.0081

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2 mainly concerned about, but I did notice from
3 the map you know there's a creek running right
4 through the area, and I'm not sure what the
5 difference between a waterway and what the
6 groundwater may be, and I was wondering what
7 the creek or the creekbed or the waterway
8 itself played any role in sort of your
9 formulation of the plan for cleanup or not?

10 MR. ALS: Actually, the Glen Cove Creek
11 there is hydraulically connected to
12 groundwater that we're talking about. We
13 actually started monitoring the program as a
14 result of the Mattiace study that we did in
15 the earlier part of this decade. We studied
16 the creek and decided that just future
17 monitoring to see how the profile of the creek
18 changes because of the amounts of the
19 contaminants we thought were still going in
20 there. We didn't think it was advisable to
21 try to clean it up at that point.

22 Subsequently there's been a lot of
23 activity, I don't know if anybody from the
24 city wants to elaborate, but the creek has
25 been dredged partially two years ago, a year

10.0082

1 and-a-half ago, and I understand that there
2 will be additional dredging work going to be
3 done there to complete the Mattiace in the
4 fall or early spring of next year, and that
5 sort of thing, you know, really changes the
6 profile that you have in sediments there too.

7
8 **MAYOR SUOZZI:** Let me point out that the
9 city has done sampling of the creek with
10 different monies it received from different
11 agencies, including the Department of
12 Environmental Conservation, the Army Corp of
13 Engineers, and the Bureau of Fish and
14 Wildlife, the public health officer was
15 involved and some other groups, secretary of
16 state's office and one of the things that we
17 found was the sampling there's no
18 radioactivity in the Glen Cove Creek, but
19 there are elevated levels in the creek
20 sediments which is stuff related to oil-based
21 products; then there's also modest levels of
22 copper as well, but for the most part, we're
23 very happy to find out there was no
24 radioactivity.

25 **MR. ALS:** In our latest finding this

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1 past summer, there was a pretty dramatic
2 decrease in various contaminants in the area
3 that was dredged a year and-a-half ago
4 compared to prior monitoring that we did. So
5 the dredging, not that that was its purpose,
6 but the dredging actually lowered the
7 contaminant profile at least towards the
8 Hempstead Harbor portion of the creek.
9

10 MS. ECHOLS: Sir, in the back.

11 MAYOR SUOZZI: Let me also point out
12 that the friend of mine caught a 20-pound
13 bluefish recently in that creek -- nobody will
14 eat it.

15 MR. HAUCK: Since we're going to be
16 competing for funds from the federal
17 government, from the EPA, what is the current
18 rating of that site on the National Priorities
19 List?

20 MR. GARBARINI: When you go through the
21 ranking process for the National Priorities
22 List using the hazard ranking system, you
23 basically need to score above a predetermined
24 value and that really is just assessing the
25 relative threats that you think the site might

10.0084

pose.

We're at the point now in the process where a lot of the information about the site, that prioritization panel that I talked about generally has a meeting of the latter part of October every year, and then we had subsequent conference calls to go back over the sites, but the first big meeting would be in October of this year, and now sometime before the end of October we would be submitting the information to them, and then they would go out to the other sites that are at the same point in the process to be funded and see how they would compare to those other sites.

MR. HAUCK: How have we done in the past?

MR. GARBARINI: In terms of where does Li Tungsten come in? This is just a remedial action. It's a specific category, so we haven't actually gone down there for the money yet.

As I mentioned earlier, when we talked about the removal action, we were able to secure more than \$6,000,000 of trust fund

10.0085

monies in the removal action, and the Region 2 has been very successful, historically.

MS. LOUGHLIN: My name's Patricia Loughlin. I'm part of the Li Tungsten Task Force. I'm also a resident on Janet Lane, which is on the north part of the area across the creek.

I came tonight for two questions: One, I have a brother-in-law who worked for Li Tungsten for 10 and-a-half years. His health is not very well right now. I also attended four funerals of four gentleman who worked there, all who died of cancer. I had a son who was one of those adolescents who trespassed. He was one of 25 or 30 boys in our neighborhood. They played in the woods because we had no playgrounds. They played war, all kinds of games. They came in contact with the wildlife. They brought home frogs, snakes, things like that.

My question is, the last cancer cluster in Glen Cove, I believe the EPA did a cancer assessment; what are those who are responsible done for the residents in the area or the

10.0086

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2 trespasser in the area, or the men who worked
3 for Li Tungsten and is the Department of
4 Health going to be brought in to do an
5 assessment?

6 MR. GARBARINI: In terms of what efforts
7 are being done or can make for residents in
8 that area or the former workers?

9 MS. LOUGHLIN: I understand it was
10 supposed to be some kind of medical survey
11 done in Suffolk County, but it was squelched
12 for the men out in Li Tungsten.

13 MR. GARBARINI: We can take a look at
14 that and we can talk to the county health
15 department.

16 MS. LOUGHLIN: I called the county
17 health department and the Department of Health
18 at the state, and I have yet to get a return
19 call; so I expect to get something soon, and
20 I'd like to know if the Mayor will take part
21 in trying to get the Department of Health in
22 here.

23 We had eight cases of cancer on our
24 street alone, 62 cases in a five-block area,
25 and that was by word of mouth. I also belong

10.0087

1 to my tenant's association.

2
3 MAYOR SUOZZI: We have a volunteer group
4 in Glen Cove that's called Glen Cove Cares,
5 that is working on trying to raise money to do
6 that now. We're working also with the
7 Department of Health, Bureau of Chronic
8 Disease and this is Bill Gillsey.

9 MR. GILLSEY: I'm with the New York
10 State Department of Health. They do those
11 sorts of surveys and a Glen Cove cancer
12 incidence study was done, I believe, in 1990.
13 It looked at records all the way up to that
14 time and through that time.

15 My recollection is that the results were
16 what we would find in many communities. The
17 types of cancers, different sites of cancer,
18 lung cancer prostate cancer, breast cancer,
19 that most of them were what we used to find in
20 communities of this size. There were a few
21 types of cancer slightly elevated, other
22 cancer deficit.

23 That study, if I talk to you afterwards,
24 I'll get your name and number and we'll get
25 back to you specifically on that to see if

10.0088

1
2 there's a need to update that based on recent
3 information or anything that's happened in the
4 last 10 years. As far as the Li Tungsten
5 site, I'll talk with our -- we have a group
6 that deals with some of the occupational --
7 I'll see, I don't know offhand if Li Tungsten
8 has been monitored for the workers and
9 employees there.

10 MS. LOUGHLIN: I would say yes. But I
11 would like to know for my son's health, young
12 men who live in my neighborhood who are now in
13 their 30's or having children and are in their
14 30's.

15 MR. GILLSEY: That's something that DOH
16 would consider. I'm not sure how many
17 questions for cancer surveys come, but I do
18 know that if the historic one had been
19 completed, we can talk afterwards.

20 MS. LOUGHLIN: When that study was done
21 in 1990, was that done throughout the city?

22 MR. GILLSEY: Department of Health
23 again. I suspect, I don't know but I can find
24 that out, I suspect it was done by whatever
25 zip codes Glen Cove used.

10.0089

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2 MS. LOUGHLIN: We only have one zip
3 code.

4 MR. GILLSEY: It will probably match
5 your zip code and/or your census track, but
6 actually, I can get back to you with the exact
7 information.

8 MS. WECH: Brenda Wech. The time frame
9 of that study?

10 MR. GILLSEY: I don't know how long it
11 took them to complete the study, but I suspect
12 they went back all the way to the '40's maybe,
13 is when they yeah, I think it was the 1940's
14 in New York State established this cancer
15 registry.

16 MS. LOVELAND: My name is Kailin
17 Loveland. In regard to alternatives LS 2 and
18 CS 2 and LS 4 and CS 4, it appears from the
19 reading of that document that alternative 2 is
20 more expensive, yet alternative 4 is more time
21 consuming, and alternative 4 is also some
22 higher risk because there's more handling of
23 the waste materials. If alternative 2 had
24 been cheaper, would that have been the
25 preferred alternative?

10.0090

1
2 MR. GARBARINI: I would say from my
3 perspective, yes.

4 MS. LOVELAND: Is there a way that the
5 data --

6 MR. GARBARINI: -- Actually, there's
7 another thing that we need to consider when we
8 do all this too is disposal capacity, but
9 seriously, that's one of the things that we
10 consider. But if there were ability to handle
11 this waste and it was cheaper, sure it would
12 be the preferred alternative from my
13 perspective.

14 MS. LOVELAND: Could the data that you
15 used to look at and process this be made
16 available in time to be looked at and then
17 commented on before the September 17th
18 deadline?

19 MR. ALS: Yes. It's in the FS,
20 feasibility study.

21 MS. LOVELAND: Thanks.

22 MS. ECHOLS: Ma'am.

23 MS. JENSEN: Jill Jensen. In the
24 proposed plan on the first page it mentions
25 that you need to decommission some industrial

10.0091

1 wells, who are these wells supplying water to
2 up until now?

3
4 **MR. ALS:** It's a defunct industrial
5 well. It used to be used at Li Tungsten for
6 industrial purposes that they had there, fire
7 suppression, and I guess process and stuff
8 like that. It's defunct, but it's a potential
9 conduit into the deeper Lloyd Aquifer, and for
10 that reason we think it should be plugged.

11 **MS. JENSEN:** Another question: In the
12 summary of noncancer hazards you mentioned
13 current off-site residents is also
14 unacceptable; what's the distance of that risk
15 in nonresidents?

16 **MS. OLSEN:** In doing the risk assessment
17 what that looked at is if wind was blown
18 off-the site into the surrounding community.
19 In doing that we basically looked at if there
20 was no ground cover present, how much material
21 would go off and how many people would be
22 exposed. We used a model to actually look at
23 the concentrations of materials blown
24 off-site. Again, if you look at the site
25 itself right now, there is considerable ground

10.0092

cover there to prevent that from occurring.

That was how we did the assessment.

MS. JENSEN: But I still I don't -- what is the distance that you are over-estimating as being a risk off-site?

MS. OLSEN: Are you asking what the off-site risk is?

MS. JENSEN: Yes.

AUDIENCE MEMBER: Are you assuming that the residents are right off the boundary of the property?

MS. OLSEN: Yes.

AUDIENCE MEMBER: What were the specific risks and the contingent responsible for it?

MS. OLSEN: The main contaminant we were concerned about is the cancer risk that Ed talked about, but for noncancer we had expedients based on negatives, and again, we have a procedure for evaluating it using information from animal studies, and we applied factors to be even more protective for you, and we did have an exceedence from the hazard index that Ed talked about.

MR. GULCRANT: My name is Tom

10.0093

1 Gulcrant. I have a couple of questions,
2 perhaps the first one for Dr. Olsen about the
3 risk assessment process. It was difficult in
4 reading the reports to address some of the
5 specifications that occur in some of the
6 inorganic contaminant pathways. Is it
7 possible for us to have further revelational
8 write-up of some of those details in the
9 response of that document, it speaks about
10 arsenic, for example, as arsenic and planning
11 for how to fix the problem.
12

13 MS. OLSEN: In toxicity it's usually the
14 chemicals that we look for in specificity, we
15 just used generic arsenic.

16 MAYOR SUOZZI: Just a question.

17 MS. OLSEN: We can provide for more
18 detail in our toxicity side. We have a
19 generic value for arsenic.

20 MAYOR SUOZZI: One of the starting
21 premise that you mentioned that was that a lot
22 of the contaminants were collocated; is it
23 your sense that during the design and actual
24 remediations that if you zoomed in on some, do
25 you really feel like these are in pools

10.0094

1
2 together and you'll be able to sweep in with
3 some sort of truck-lingo to get it back out;
4 do you think there's going to be a more
5 tactical level removal or --

6 MR. GARBARINI: Generally during design,
7 we will conduct some additional sampling to
8 further define cut lines and depending on the
9 weight of information we have, our guess from
10 what the R data is and maybe a couple pockets
11 here and there.

12 AUDIENCE MEMBER: Towards that end of
13 actually planning for material to be moved,
14 excavated, at that point you're starting to
15 spend money, will you be making those
16 decisions when the deal is brought together?
17 It's tough to tell whether this is the way
18 things are supposed to work or not, you have
19 some remedies in mind with some straight cost
20 estimates. Is it usual that the PRPs find out
21 about this and sign on not so usual? Is
22 liability dependent upon knowing who's coming
23 to the table, who's signed on, and how much of
24 the cost they're going to possibly have to
25 pay?

10.0095

1
2 MR. DOYLE: I may not be entirely clear
3 on what you're asking, but the parties that
4 were identified were asked both before and
5 after the subsequent removal actions. They
6 were asked if they wanted to do it, so to the
7 extent that they were to be involved in the
8 process prior to this, in many sites they are
9 because they came in early on to do RI/FS.
10 At the same time it's not uncommon for us to
11 go to the RI/FS, while the RI/FS is ongoing
12 they're going to be asked to do the work as
13 described in the decision. So if it turns out
14 the cut lines are moved to the left or right,
15 they will be on the hook to do that to our
16 satisfaction.

17 AUDIENCE MEMBER: Earlier it seemed like
18 you were still identifying the people and you
19 hadn't been able to testify, that they were
20 still being sought out.

21 MR. DOYLE: That's a misunderstanding on
22 our part. I should emphasize we have
23 identified PRPs is an acronym for
24 Potentially Responsible Parties. That doesn't
25 mean that a party can't come in and show us

10.0096

1 evidence that beyond any question his name
2 shouldn't be on the list, but at this time
3 it's we've got about 30 parties that we told
4 them we think they're on the list, and we're
5 going to ask them to do work, and there may be
6 more. I think 130 some-odd customers, former
7 customers, and as we're evaluating the
8 responses, the list, it's possible it will go
9 up a little bit, it's possible it will go down
10 a little bit, and it's possible that the
11 number will pretty much --

12
13 **AUDIENCE MEMBER:** Last question, simple
14 one: Is it typical that you would present the
15 cost as a number like that \$29,742,000 or is
16 it possible that we could ask that you present
17 the range, such as an assumption of 50 percent
18 line reduction, means that that number is
19 based on some guess; is it typical that that's
20 the way the numbers present, at least
21 \$29,000,000 conservative or perhaps ranging to
22 some other number?

23 **MR. GARBARINI:** We generally will come
24 up with a number and discuss what the
25 assumptions were that went into generating

10.0097

1 that number. In other instances we may talk
2 about what sort of range, but inherent in any
3 of our estimates, this is a rough estimate
4 when we get through our remedial design, we'll
5 have something better in mind. Right now
6 we're talking about plus 30, minus 50, plus
7 25, minus 50 is the estimate.
8

9 MAYOR SUOZZI: I want to make a
10 suggestion based on what Mr. Garbarini just
11 said. The city is doing the state-related
12 cleanup at Captain's Cove. When we were
13 designing the remedy for that site, it
14 couldn't be this amount of weight up to that
15 amount of weight. We were guessing about how
16 much waste was there and the number would
17 bring in somewhere from \$3,000,000 to
18 \$6,000,000, and we said let's spend \$25,000
19 now and dig big holes and find out what's
20 there a little better. I'm going to make a
21 suggestion that either the EPA spend a modest
22 amount of money now to get a better idea
23 before they cleanup the site, or the PRPs get
24 some preliminary estimates before they come in
25 wholehearted try to solve this problem and

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1
2 make a modest investment of less than \$100,000
3 to find out exactly how much waste is there by
4 actually digging holes. Just to suggest that
5 we did plenty of core sample cells, get a lot
6 of information for the core samples, but we
7 actually went out and dug big holes.

8 MR. GARBARINI: That's not a bad idea.
9 I think that could certainly be predesigned
10 before all is said and done. Lots of times
11 what we try and do during the RI/FS is get
12 through it so we can actually get out there --
13 especially with a dig and haul -- you really
14 get out there and move the earth around, and
15 that's when you really figure out.

16 MAYOR SUOZZI: One of the things is the
17 PRP if it's your responsibility at all, you can
18 get a better idea of what it's going to be,
19 you actually dig a hole around them and find
20 out and it's not guessing.

21 MR. GARBARINI: Okay.

22 MR. GARVEY: I'm going to add something
23 to that comment but also I think with PRP
24 participation in the cleanup and typically
25 they can find cheaper ways of doing different

10.0099

1 things, and certainly it's in their interest
2 to try and do that given it's got to be with
3 our concurrence, and I think you do see the
4 numbers adjusted once the PRPs are focused and
5 they are somewhat designing the remedial
6 actions. It's a starting point. It's a
7 baseline number, I think, if nothing else.

8
9 I wanted to make sure that the attendees
10 of this meeting knew that just to emphasize it
11 that EPA has to date spent approximately
12 \$10,000,000 at this site. I think we have
13 touched on those costs to some degree if the
14 folks out there have asked us in a variety of
15 ways what our share is here, or what our
16 funding level would be here, but to date to
17 get to this point, we have spent about
18 \$3,500,000 in performing the remedial
19 investigation and feasibility study, and as
20 Jim Doyle pointed out a few minutes ago, the
21 offer was made at least to the initial parties
22 that we had identified in the early '90s for
23 them to do that work. They declined. We
24 spent Superfund money to get that work done.
25 A similar offer was made to perform the

10.0100

1 removal action which was completed last
2 October. That was an EPA lead because the
3 PRPs that had been identified to that point
4 had declined to perform it. That cost about
5 \$6,500,000, on top that that would be the
6 \$29,000,000 remedy that we have been
7 discussing here tonight.

8
9 MS. ECHOLS: Sir.

10 MR. NEERY: Dave Neery, Glen Cove. So
11 what you're saying is that \$10,000,000 plus
12 the remedy, are you going after the PRPs for
13 the \$10,000,000 already spent?

14 MR. DOYLE: Yep. If it's possible and
15 conceivable, then we'll -- in cases across the
16 country we sometimes split the baby and say
17 we'll sue you now for the work, and sue you
18 later for the cost. There's various policies
19 that we have where you can come in and
20 actually do the work and get money off our
21 pass-off the cost bills; so there are
22 inducements to get parties to come in.

23 MR. NEERY: So when you get them around
24 the table they're really talking about an
25 estimate of about \$40,000,000 in total?

10.0101

1
2 MR. DOYLE: Yes, that's right.

3 MS. ECHOLS: Any more questions?

4 MAYOR SUOZZI: I want to make one last
5 comment. I know a lot of people have
6 volunteered over the last several years on the
7 Li Tungsten Task Force as well as any other
8 people that are part of the Li Tungsten Task
9 project, and I'd like everybody to get these
10 volunteers a round of applause for the work
11 that they have done. (Applause.)

12 I also want to thank all the different
13 professionals that have worked on this process
14 for years as well, the EPA, Department of
15 Health, and all the consultants that have been
16 involved -- who also get paid a lot of money
17 -- but I feel very grateful to a lot of people
18 who are very serious in this community.

19 Also, I'm just making an appeal to the
20 PRPs that have their representatives here
21 tonight, and I know that they're here but are
22 not making themselves known, I'm appealing to
23 them in general that we want to try and get
24 this thing cleaned up quickly and effectively
25 and safely for our residents as soon as

10.0102

1 possible. And I think you have heard from the
2 people that are here both from the public, as
3 well as the professionals that are here, as
4 well as the government officials that have
5 spoken, that we're reasonable people, that we
6 want to do this right, and we want to do this
7 quickly. So to the PRPs that are here tonight
8 -- and I know there are a lot of you here --
9 and I can't tell you who I represent, but I'm
10 here representing a PRP -- but we want to
11 appeal to a few of you to try and make this
12 thing happen, and not to wait another five
13 years of this while we're just sitting there,
14 and affecting our residents' conditions, and
15 we ask you to please come up to the table. We
16 are reasonable. Thank you very much.

17
18 MS. ECHOLS: Mayor Suozzi, we would like
19 to thank you for all your generous comments
20 tonight, and your ability to get all of this
21 worked out and wanting to get your community
22 cleaned up. Thank you very much.

23 I just want to mention again that the
24 comment period ends September 17th, and if you
25 have e-mail access, our internet address is on

10.0103

the second page and/or you can call me at
800-346-5009. Thank you again.

(Time ended: Said 9:40 p.m.)

10.0104

C E R T I F I C A T I O N

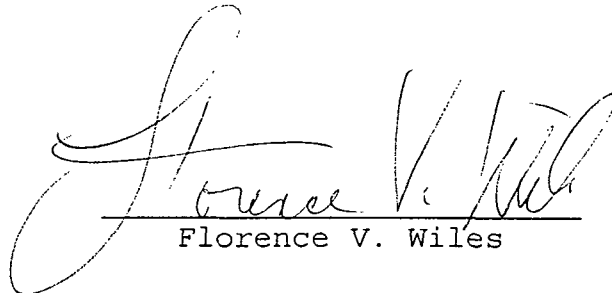
I, Florence V. Wiles, Notary Public for
the State of New York, do hereby certify:

THAT the within transcript is a true
record of the testimony given.

I further certify that I am not related by
blood or marriage, to any of the parties to
this action; and

THAT I am in no way interested in the
outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my
hand this 16th day of August, 1999.


Florence V. Wiles

10.0105

<p>- ' -</p> <p>'40's [1] 90:12 '42 [1] 55:25 '70s [1] 33:5 '80s [2] 21:23; 22:6 '84 [1] 78:17 '90s [1] 100:22</p> <p>---</p> <p>-- [46] 3:15; 23:5; 25:16; 29:3; 30:15; 40:4; 41:19; 43:16, 17; 47:21, 22; 49:18, 19; 51:20; 59:4, 5; 62:8, 19; 66:5; 71:11, 12; 73:14, 15, 25; 74:2; 75:5, 6; 80:10, 11; 84:13; 89:5, 6; 91:5, 6; 93:4; 95:5; 97:12; 99:12, 13; 101:15; 102:16, 17; 103:9, 11</p> <p>-----</p> <p>[6] 1:2; -----; 1:6; -----; 1:--</p> <p>-4 [5] 30:17, 21, 23; 31:10; 32:9</p> <p>-6 [4] 30:17, 20; 31:4; 32:10</p> <p>- 0 -</p> <p>0 [1] 62:21</p> <p>- 1 -</p> <p>1 [11] 20:8; 21:20; 34:21; 36:9, 10; 46:12, 13; 59:17; 74:13, 25; 75:7 1,177 [2] 59:4, 5 1,400 [2] 10:22; 17:9 1,500 [1] 72:17 1-800-346-5009 [1] 7:4 1.2 [2] 75:2; 77:18 10 [19] 1:10; 2:11; 8:19; 17:6; 30:17, 20, 21, 23; 31:4, 9; 32:9, 10; 33:13, 14; 34:22; 62:25; 86:11; 89:4 10,000 [2] 30:23; 33:18 10,000,000 [3] 100:12; 101:11, 13 100 [2] 10:24; 62:25 100,000 [1] 99:2 11 [1] 57:15 12 [4] 27:13, 14; 57:18; 78:21 130 [1] 97:7 14 [2] 19:6; 27:14 15 [3] 12:22; 13:14; 79:10 16 [1] 3:16</p>	<p>1600's [1] 4:5 16th [2] 1:9; 105:14 175 [1] 6:12 17th [4] 6:9; 69:13; 91:17; 103:24 190 [1] 17:11 1940's [1] 90:13 1942 [2] 18:23; 48:22 1980 [2] 9:4, 7 1985 [2] 19:4; 22:14 1989 [1] 21:3 1989-1990 [1] 19:7 1990 [3] 58:23; 88:12; 89:21 1991 [2] 19:9; 21:12 1996 [2] 21:14; 22:17 1998 [1] 21:14 1999 [3] 1:9; 43:15; 105:14</p> <p>- 2 -</p> <p>2 [26] 20:7, 9, 19; 47:5; 59:18; 19, 24, 25; 60:25; 65:9; 67:11; 71:7; 72:5, 8; 75:25; 86:2; 90:17, 18, 19, 23 20 [2] 17:6; 44:9 20-pound [1] 84:12 2001 [4] 54:16, 25; 55:13; 75:14 2002 [1] 75:19 2003 [3] 75:18, 19, 21 2004 [1] 75:21 21 [1] 48:17 22 [3] 48:17; 49:7, 8 238 [1] 27:5 24 [1] 34:18 25 [2] 86:16; 98:8 25,000 [2] 2:9; 98:18 26 [1] 59:7 271 [1] 21:15 28,000,000 [2] 44:22; 52:4 28,000,000- [1] 51:10 28,764,000 [1] 44:25 28th [1] 6:8 29,000,000 [9] 44:25; 45:16; 51:10; 75:3; 76:7; 78:12; 79:2; 97:21; 101:7 29,742,000 [1] 97:15</p> <p>- 3 -</p> <p>3 [12] 37:21; 59:18, 25; 60:2; 61:2, 12; 62:6; 65:18; 74:25; 75:25; 76:3 3,000,000 [1] 98:17 3,500,000 [1] 100:18 30 [8] 17:6; 47:10; 48:18; 69:10; 79:4; 86:16; 97:4; 98:7 30's [2] 89:13, 14</p>	<p>30,000 [1] 2:10 30-year [1] 44:24 300 [1] 2:12 32,000 [1] 44:23</p> <p>- 4 -</p> <p>4 [21] 44:17; 59:17; 60:2; 61:2, 12; 65:10; 67:22; 71:7; 72:3, 7; 74:25; 90:18, 20, 21 4,500,000 [3] 79:24, 25; 81:12 40 [1] 104:5 40,000,000 [1] 101:25 400 [1] 34:19 4222 [1] 60:2 4232 [1] 61:10 43 [1] 19:3 45 [1] 17:22</p> <p>- 5 -</p> <p>5 [2] 34:20, 21 5,600 [1] 11:9 50 [4] 36:19; 97:17; 98:7, 8 500 [1] 32:24 500,000 [10] 75:3, 4, 24; 76:6, 11; 78:11, 13; 79:3, 9, 10</p> <p>- 6 -</p> <p>6,000,000 [2] 85:25; 98:18 6,500,000 [1] 101:6 60-day [1] 10:18 610 [1] 17:17 62 [1] 87:24 650 [1] 17:19</p> <p>- 7 -</p> <p>7 [1] 1:10 700,000 [2] 78:8, 10 722,000 [1] 74:24</p> <p>- 8 -</p> <p>8,350 [3] 79:20, 23; 80:17 800 [1] 7:3 800-346-5009 [1] 104:3 843-2700 [1] 81:20</p> <p>- 9 -</p> <p>9 [2] 1:10; 104:5</p>	<p>- A -</p> <p>abandoned [3] 4:9; 9:11, 23 abandonment [1] 37:3 ability [2] 91:10; 103:20 able [6] 5:24; 6:5; 66:8; 85:24; 95:2; 96:19 about [74] 2:8, 9; 4:12, 22; 5:9; 7:15, 18; 8:19; 9:8; 10:18, 22; 12:22, 24; 13:7, 14; 14:25; 17:13, 17; 18:23; 19:5; 24:14; 25:3; 28:11; 42:15; 44:8, 18; 45:3, 15; 46:5; 52:3; 56:9; 57:4, 18, 23, 24; 58:2, 12, 17, 19, 25; 59:7, 15; 62:25; 67:20; 69:17; 73:4; 74:24; 75:2; 76:5; 78:7, 15; 79:23; 80:17; 81:11; 82:2, 12; 85:4, 5, 24; 93:17, 18, 24; 94:3, 10; 95:21; 97:4; 98:3, 7, 15; 100:17; 101:5, 24, 25 above [8] 10:15; 31:9, 11; 60:7; 64:22; 75:10, 22; 84:23 above-captioned [1] 1:8 absolute [1] 62:10 absolutely [2] 55:18; 62:21 absorbed [1] 63:12 absorption [1] 41:7 absorptions [1] 29:13 accelerated [1] 44:14 acceptability [2] 32:11; 58:4 acceptable [4] 14:16, 22; 32:9; 41:22 acceptance [2] 68:22 access [2] 29:9; 103:25 accomplished [1] 65:2 according [1] 62:6 account [1] 52:4 achieve [3] 16:21; 17:19; 77:5 achieved [5] 17:2, 6; 34:15; 38:15; 60:6 achieving [2] 35:18; 67:22 acres [1] 2:12 across [9] 9:10; 10:22; 11:10; 12:23; 14:15; 24:5; 70:8; 86:7; 101:15 act [2] 9:6; 39:3 action [24] 11:13; 13:11; 16:2; 19:8, 9; 21:4, 6, 13; 30:2, 24; 31:4; 36:3, 5; 37:7; 39:21; 43:22; 56:20; 74:14; 78:14; 85:20, 24; 86:2; 101:2; 105:10 actions [13] 11:6, 7, 9, 10, 11; 13:7, 16; 18:21; 20:25;</p>
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